V. REMARKS

Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by Japanese Patent Application Publications 06-275543 to Okamoto et al. The rejection is respectfully traversed.

Okamoto teaches a plasma generating device. An intermediate electrode 5 surrounds the periphery of a plasma space formed between a high-frequency electrode 4 and a grounded electrode 2 with a metal plate. The frequency and phase of the voltage applied across the intermediate electrode 5 from a high-frequency power source 51 are made coincident with the frequency and phase of the voltage applied across the electrode 4.

It is respectfully submitted that the above mentioned "the gas supplying member being disposed in the vacuum container without connection to the power source" as now recited in claim 1 is not disclosed in Okamoto or any of the other cited references. Since the gas supplying member is not connected to the power source of the power applying device, a power for forming the plasma is not applied to the gas supplying member. The power is applied from the power source to the power applying electrode, and thereby a high density plasma can be generated while suppressing increase of plasma potential, whereby a thin film of high quality can be formed at a high deposition rate (see [0008] to [0016] of the specification).

The article supporting member (support) is grounded as disclosed in [0034] of the specification.

It is respectfully submitted that the rejection is improper because the applied art fails to teach each element of claim 1 as amended above. As a result, it is respectfully submitted that claim 1 is allowable over the applied art.

Withdrawal of the rejection is respectfully requested.

Claim 2 is rejected under 35 U.S.C. 103(a) as unpatentable over Okamoto in view of U.S. Patent No: 5,422,139 to Fischer. The rejection is respectfully traversed.

Fischer discloses a method for treating a surface by reactive process. Several gas inlet openings are formed into a reactor vessel. Several gas

retrieving openings are provided from the reactor vessel. The gas inlet and gas retrieving openings are arranged neighboring each other and distributed along a surface opposite the surface to be treated. Each of the openings has central axes directed substantially perpendicular to the surface to be treated and each gas inlet opening is associated with a gas retrieving opening to define a pair of openings. A gas mixture having a reactive gas is fed to the gas inlet openings for injecting the gas towards the surface to be treated. Gas having reaction products resulting from a reactive treatment of the surface to be treated is withdrawn out of the reactor vessel through the gas retrieving openings. An effect of a treatment on an area being treated by a given pair of openings is controlled by adjusting one of a group of variables. Such variables include selecting, as a first variable, a distance between a gas inlet opening and a gas retrieving opening forming an opening pair, and selecting, as a second variable, a distance of the opening pair to an area of the surface to be treated opposite the pair, and selecting as a third and a fourth variable, a gas injecting rate and a gas withdrawing rate, respectively. An adjustment of at least one of the variables results in a variation of a treatment effect by reactive process of the surface being treated at the area, which variation is larger than variations of a treatment effect of a surface being treated occurring at surface areas adjacent the area disposed opposite the given pair of openings which variations result from the adjustment.

Claim 2 depends from claim 1 and includes all of the features of claim 1. Thus, it is respectfully submitted that claim 2 is allowable at least for the reason claim 1 is allowable as well as for the features it recites.

Withdrawal of the rejection is respectfully requested.

Claim 3 is rejected under 35 U.S.C. 103(a) as unpatentable over Okamoto in view of U.S. Patent No: 5,404,079 to Ohkuni and U.S. Patent No: 6,099,687 to Yamazaki. The rejection is respectfully traversed.

Ohkuni teaches a plasma generating apparatus that includes a vacuum chamber, a plasma generator and ion extractor. The plasma generator includes N first electrodes (N is an integer not less than 2) disposed at roughly regular intervals in the vacuum chamber and a first high-frequency power supply for

supplying the first electrodes in the order of their arrangement with high-frequency electric powers. Each has a first frequency but differs in phase by (360/N) degrees, so as to generate, by means of a rotating electric field formed by the first electrodes, a highly-dense plasma in a plasma generating part surrounded by the first electrodes. The ion extractor includes a second electrode, an earth electrode. Both the second and the earth electrode are disposed in the vacuum chamber. A second high-frequency power supply supplies the second electrode with high-frequency electric power having a second frequency so as to extract ions from the plasma which has been generated in the plasma generating part. The earth electrode is placed in such a position that an electric field formed between the earth electrode and the second electrode does not interfere with the rotating electric field formed by the first electrodes.

Yamazaki discloses an etching system for plasma-etching a thin film over an insulating substrate of more than 8 inches in diameter or forming a rectangle having a size of 200 mm or more on each side thereof. The etching system includes an agitating electric field system and an agitating magnetic field system beside an etching power source. The agitating electric field system has agitating electrodes disposed around a plasma reaction space so as to be able to apply an electric field in parallel to a surface of the insulating substrate and agitating power sources connected to the agitating electrodes via amplifiers. The agitating magnetic field system has agitating magnets disposed around the plasma reaction space so as to be able to apply a magnetic field in parallel to the surface of the insulating substrate.

Claim 3 depends from claim 1 and includes all of the features of claim 1. Thus, it is respectfully submitted that claim 3 is allowable at least for the reason claim 1 is allowable as well as for the features it recites.

Withdrawal of the rejection is respectfully requested.

Claim 4 is rejected under 35 U.S.C. 103(a) as unpatentable over Okamoto in view of Japanese Patent Application Publications 2001-189308 to Fujita et al. The rejection is respectfully traversed.

Fujita teaches a parallel plate plasma treatment device. A number of reaction gas supplying nozzles are attached to an upper electrode per unit area and can be changed in the plane of a wafer. As such, the in-plane uniformity of the film forming speed is improved by concentrically introducing the film-forming gas to an area where the film forming speed is slow.

Claim 4 depends from claim 1 and includes all of the features of claim 1. Thus, it is respectfully submitted that claim 4 is allowable at least for the reason claim 1 is allowable as well as for the features it recites.

Withdrawal of the rejection is respectfully requested.

Newly-added claim 14 also includes features not shown in the applied art.

In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

Respectfully submitted,

Date: June 21, 2005 By: _____

David T. Nikaido
Reg. No. 22,663

Carl Schaukowitch
Reg. No. 29,211

RADER, FISHMAN & GRAUER PLLC
1233 20th Street, N.W. Suite 501
Washington, D.C. 20036
Tel: (202) 955-3750
Fax: (202) 955-3751
Customer No. 23353

Enclosure(s): Amendment Transmittal

DC198221.DOC